

Air Quality Permitting Technical Memorandum

Tier II Operating Permit and Permit to Construct No. 777-00177

VALLEY READY MIX, INC. REXBURG, IDAHO

Prepared By:

Kent Berry
Environmental Quality Management, Inc.

Project No. T2-020502

Date Prepared:

September 6, 2002

Permit Status:

FINAL

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AFS AIRS Facility Subsystem

AIRS Aerometric Information Retrieval System

cfm cubic feet per minute
CO carbon monoxide

DEQ Department of Environmental Quality
EPA U.S. Environmental Protection Agency
EQ Environmental Quality Management, Inc.

HAPS hazardous air pollutants

IDAPA a numbering designation for all administrative rules in Idaho promulgated in

accordance with the Idaho Administrative Procedures Act

kW kilowatt

lb/hr pounds per hour

MACT Maximum Achievable Control Technology
NAAQS National Ambient Air Quality Standards

NESHAP National Emission Standards for Hazardous Air Pollutants

NO_x nitrogen oxides

NSPS New Source Performance Standards

PM particulate matter

PM₁₀ particulate matter with an aerodynamic diameter less than or equal to a nominal

10 micrometers

PSD Prevention of Significant Deterioration

SIP State Implementation Plan

SM synthetic minor
SO₂ sulfur dioxide
T/hr tons per hour
T/yr tons per year

VOC volatile organic compound

PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01 Sections 200 et seq. and 404.04, *Rules for the Control of Air Pollution in Idaho*, for Permits to Construct and for Tier II operating permits.

PROJECT DESCRIPTION

Valley Ready Mix, Inc. (Valley Ready Mix), located in Rexburg, Idaho, has requested renewal of their Tier II operating permit originally issued September 27, 1996. The regulated emissions sources at the facility are as follows:

Table 1.1 FACILITY EMISSIONS SOURCES

Permit Section	Source Description	Emissions Controls		
2	Fugitive emission souces (e.g., roads, piles, material transfers)	Reasonable controls		
3	Screens; EL-JAY, rated at 200 T/hr	Water spray; Eagle Iron Works		
3	Cement silos (4)	Vent filter; McHeilus Truck and Mfg. SVF 270, 650 cfm		
3	Diesel generator; Detroit 8V-92, 200 kW	None		

Unregulated Sources

Table 1.2 lists sources of emissions that do not require specific permit limits.

Table 1.2 UNREGULATED EMISSIONS SOURCES

	Source Descrip	tion	
Fuel oil tank			

FACILITY DESCRIPTION

The description of this facility and the equipment regulated in the permit have not changed since issuance of the original Tier II operating permit in 1996, except for the addition of two cement silos identical to the original ones but vented to the same control device. For facility and equipment descriptions, refer to the technical memorandum dated August 5, 1996, written by Yihong Chen, DEQ Air Quality Engineer.

SUMMARY OF EVENTS

February 22, 2002 Valley Ready Mix requested renewal of their Tier II operating permit that expired

September 27, 2001.

May 28, 2002 DEQ deemed the application complete.

March 6, 2002 Valley Ready Mix notified DEQ of the new cement silo and submitted payment of

the Tier II permit fee.

June 26, 2002 DEQ issued a facility draft Tier II for review. No comments were received.

July 10, 2002 DEQ issued a proposed Tier II permit for public comment.

August 14, 2002 The public comment period closed. Responses to the comments received have

been prepared.

PERMIT HISTORY

The following is a summary of the permit files available to EQ:

September 27, 1996 A Tier II operating permit was issued that limited the facility to "SM" status for

purposes of Tier I permitting.

DISCUSSION

Emissions Estimates

The emission calculations for criteria air pollutants have not changed since the issuance of the Tier II permit September 27, 1996, except for the new cement silo. For emission estimate information for this facility, refer to the technical memorandum dated August 5, 1996, written by Yihong Chen, DEQ Air Quality Engineer.

2. Modeling

Modeling for the criteria air pollutants, as presented in the August 5, 1996 technical memorandum by Yihong Chen, is still valid. The emissions from the silos are not increased and do not affect the NAAQS compliance demonstration.

3. Facility Classification

The concrete batch plant is not a major facility as defined in IDAPA 58.01.01.006.55 or 008.10. It is not a designated facility as defined in IDAPA 58.01.01.006.27. The facility is classified as a "SM" source because actual and potential emissions of regulated air pollutants are limited to less than 100 T/yr by the permit.

4. Regulatory Review

This operating permit is subject to the following permitting requirements:

a.	IDAPA 58.01.01.401	Tier II Operating Permit
b.	IDAPA 58.01.01.403	Permit Requirements for Tier II Sources
C.	IDAPA 58.01.01.404.01(c)	Opportunity for Public Comment
d.	IDAPA 58.01.01.404.04	Authority to Revise or Renew Operating Permits
e.	IDAPA 58.01.01.406	Obligation to Comply
f.	IDAPA 58.01.01.470	Permit Application Fees for Tier II Permits
g.	IDAPA 58.01.01.625	Visible Emission Limitation
h.	IDAPA 58.01.01.650	General Rules for the Control of Fugitive Dust
i.	IDAPA 58.01.01.725	Rules for Sulfur Content of Fuels
i.	IDAPA 58.01.01.200 et seg.	Requirements for Permits to Construct

5. Permit Conditions

All conditions from the September 27, 1996, Tier II permit including the throughput limits, have been retained. The emission limits for the cement silos remain the same because the new silos are vented to the same control device. The format of the permit has been changed to match DEQ's current template for Tier II operating permits.

6. AIRS

AIRS/AFS FACILITY-WIDE CLASSIFICATION DATA ENTRY FORM

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MAGT (Part 63)	mr± V	AREA CLASSIFICATION A – Attainment U – Unclassifiable N – Nonattainment
SO ₂	В						Α
NO,	В						U
CO	В						U
PM ₄₉	SM						U
PM (Particulate)	SM						. А
VOC	В						U
THAP (Total HAPs)	NA						NA NA
			АРР	LICABLE SUBI	PART		*

AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For NESHAP only, class "A" is applied to each pollutant which is below the 10 T/yr threshold, but which contributes to a plant total in excess of 25 T/yr of all NESHAP pollutants.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).

FEES

Fees apply to this facility in accordance with IDAPA 58.01.01.470. The facility is subject to Tier II permit application fees of \$500, which were paid at the time of application.

RECOMMENDATIONS

Based on the review of the application materials, and all applicable state and federal regulations, staff recommends DEQ issue a Tier II operating permit and Permit to Construct to Valley Ready Mix, Inc. A public comment period on the air quality aspects of the proposed permit was provided in accordance with IDAPA 58.01.01.404.01.c.

KB/MS:bh T2-020502 G:AIR QUALITY/STATIONARY SOURCE/SS LTD/T2/VALLEY READY MIX/FINAL/T2-020502 TECH MEMO.DOC

cc: Kent Berry, EQM
Rensay Owen, Idaho Falls Regional Office
Joan Lechtenberg, Air Quality Division